

LET'S LOOK AT
SHORTENING

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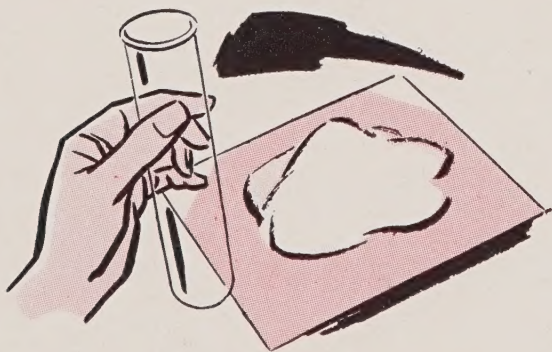
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What Is a Shortening?



SHORTENING is made from fats and oils and is used extensively in all types of cookery to enhance the eating quality of foods and to increase their nutritive value. The word shortening, therefore, implies cooking performance, such as the ability to cream easily, to blend perfectly, to shorten effectively.

The terms fat and oil refer to their physical state at ordinary room temperatures. A fat is a product which is a solid at room temperature (about 70°F.), while an oil is a liquid at the same temperature.



Fats and oils, as such, are not ordinarily used in cookery. They are accorded special treatment and processing in order to improve certain inherent qualities needed in the final product for successful cookery. An oil, for example, becomes solid and plastic only after it has been carried through certain transforming stages of manufacture. Thus all-hydro-

genated vegetable shortenings are made from vegetable oils, lard from hog fat.

Chemically, fats, oils, and of course shortenings which are made from them, are composed of carbon, hydrogen, and oxygen and consist of a combination of fatty acids and glycerol. One molecule of fat is made up of three molecules of fatty acid and one of glycerol. There are many different fatty acids constituting the fat molecule and the character of the fat itself is determined in large part by the fatty acids present.

Fats and oils comprise a group of foods that have been important in the diet since the earliest times. Ancient Egypt "shortened" its bread, Imperial Rome made its oil fritters, classic Greece had its sweet sesame pastries.

Biblical writings make frequent reference to "butter," "fat," and "oil." Such statements as "she brought forth butter in a lordly dish," "ye shall eat the fat of the land," and "his words were softer than oil" are expressive of the good repute in which fats have been held since the earliest times.

Fat in some form is a basic ingredient of almost every branch of cookery and contributes materially to the pleasures of the table. And further, modern scientific research has shown that fats play a vital rôle in normal nutrition.

Bird's-Eye View of the Shortening Field



SHORTENINGS are made from fats and oils which may come from either the animal or vegetable kingdom. Shortenings of animal origin include butter, lard, and beef-fat products; among those of vegetable origin are all-hydrogenated vegetable shortenings, olive oil, cottonseed oil, soya bean oil, corn oil. Also, shortenings may be mixtures of animal and vegetable fats, as in the case of some oleomargarines and compounds. Of the various shortenings on the market, those in common use include: *butter, lard, compounds, oleomargarines, vegetable oils, and all-hydrogenated vegetable shortenings.*



BUTTER is the fat of milk separated from cream by churning the milk until the globules of fat stick together in one mass. After churning, the fat is separated from the buttermilk, washed, salted (generally), and worked.



Butter is prized for the superb flavor which it alone can contribute. As a table "spread" and as an enriching flavor for vegetables, butter has no peer. In baked products, which require an efficient "shortener," a less expensive shortening is often preferred. Since butter contains only 80 to 85% fat, it does not have the shortening efficiency of a shortening which is 100% fat.

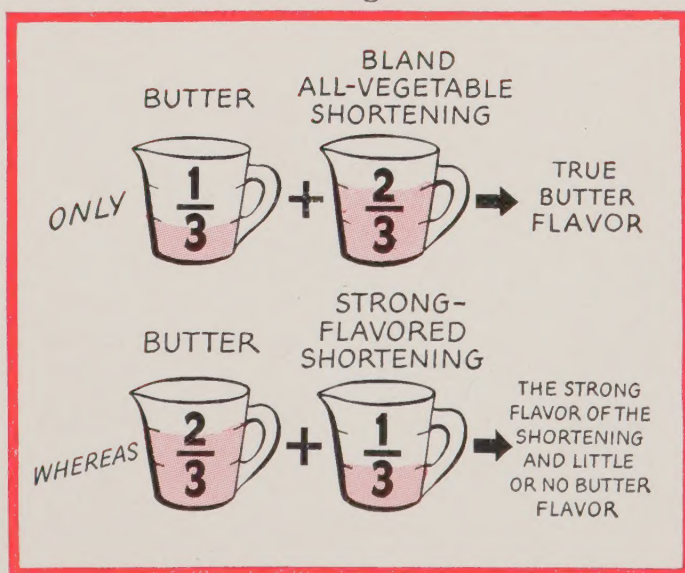
In cookery, butter may be blended with a less expensive shortening. The ideal practice, in this case, is to use a bland, neutral shortening which permits even a small amount of butter to impart its true flavor to the final product. (Note how this fact is borne out in the accompanying drawing.) Thus butter may be used for the purpose for which it is eminently fitted — that of contributing characteristic flavor.

Butter is valued, not only for its flavor and fuel value, but also for the vitamins — A and D — which it contains.

LARD, the rendered fat obtained from hogs, is one of the oldest shortenings.

The three types of commercial lards are: *kettle-rendered, steam-rendered, and dry-rendered.* Leaf fat is commonly rendered in an open steam-jacketed kettle to produce *kettle-rendered* lard. Fat stocks from other parts of the hog are usually rendered in the presence of steam to produce *steam-rendered* lards, or they may be rendered in vacuum to yield *dry-rendered* lards. The quality of lard depends mainly upon the stocks from which it was made and the process by which it was rendered.

Lard is practically 100% fat. Ordinarily, its pronounced odor and flavor, along with poor creamability, have limited its use in cake-making.



COMPOUNDS constitute a class of shortenings which are usually made by mixing or blending a hard fat with a softer fat or an oil to give the required body to the final product.

Originally, they were made as substitutes for lard and frequently contained some lard. Today, compounds are made from all-vegetable fats, from all-animal fats, or from a mixture of the two.

The nature of the stocks used in making these compounds naturally determines to a large extent the quality of the finished shortening. Compounds usually have a stiff consistency and a dry, dull appearance. They possess characteristic odor and flavor, depending upon the formulas used in their manufacture. They are, however, milder in odor and flavor than lard.

Compounds also show wide variations in quality and price.

OLEOMARGARINES may be defined as follows: "Margarines, called Oleomargarines in the United States of America, are composed substantially of edible animal and/or vegetable fats, water, salt, and minor quantities of solids and flavors derived from ripened skimmed milk or whole milk."

The history of oleomargarines is really the story of a quest for a butter substitute. During the Franco-Prussian War, the French Government, faced with the exorbitant cost of butter, offered a prize to anyone who would produce a successful substitute. A chemist, by the name of Mège-Mouries, took first honors by originating oleomargarine — a product made from beef suet. This new fat was widely used by the French and later was produced extensively in other countries. The World War accentuated the need of a table fat to take the place of butter. Today, there are many different products of this type on the market.

The chief use of oleomargarine is as a "spread" for the table; it is also used as an ingredient in cookery.



VEGETABLE OILS. For centuries olive oil — one of the first fats used in cookery — has enriched the foods of the people dwelling along the shores of the Mediterranean.

Of the domestic vegetable oils, cottonseed, corn, soya bean, and peanut oils are among those commonly used. The oils are pressed out of the fruit or seed (usually with the application of heat). The expressed oils are then refined to remove coloring substances and may be further treated for the removal of characteristic odors and flavors.

Because of their liquid state, oils have limited use in cookery. In American cookery, they are used chiefly in making salad dressings.



ALL-HYDROGENATED VEGETABLE SHORTENINGS represent the most modern developments in the shortening industry. The best of these shortenings are made from a blend of carefully selected vegetable oils specially refined and processed to give a bland product.

The process of hardening the oils consists of treating them with the amount of hydrogen gas necessary to bring about the desired degree of hardening. This process is called *hydrogenation*. Lastly, the hydrogenated stock is creamed again and again to give a smooth shortening.

The term *all-hydrogenated shortening* derives from the fact that *all* the oils are subjected to hydrogenation, whereas in compounds, only a portion, if any, of the base oils is hydrogenated.

Properly made, all-hydrogenated vegetable shortenings are creamy white in color, bland in odor and flavor, smooth in texture, plastic in consistency. Their excellent creamability makes it possible to incorporate large amounts of air in the creaming. These shortenings keep sweet at room temperature because hydrogenation effects a chemical change in those constituents of the original oils responsible for developing off-odors and rancidity.

Functions of Shortening in Cookery

A SHORTENING has many functions to perform in general cookery. So closely is fat allied to the whole field of cookery that it is hard to think of many cooking processes that are not dependent upon it. There's the lightness of a cake . . . the flakiness of pastry . . . the tenderness of a biscuit . . . the crisp brown crust of fried chicken — each is in some way tied up with shortening. And what's more, the eating enjoyment of all these foods and many more besides is enhanced by the use of shortening.

Let's look then at the functions of a shortening and see why it is that modern cookery demands so much of this basic ingredient. These functions may be listed as follows:

1. To contribute shortness to baked products
2. To serve as a frying medium
3. To improve texture
4. To act as a carrier of flavor
5. To enhance palatability
6. To increase the nutritive value of foods.

1. To Contribute Shortness to Baked Products

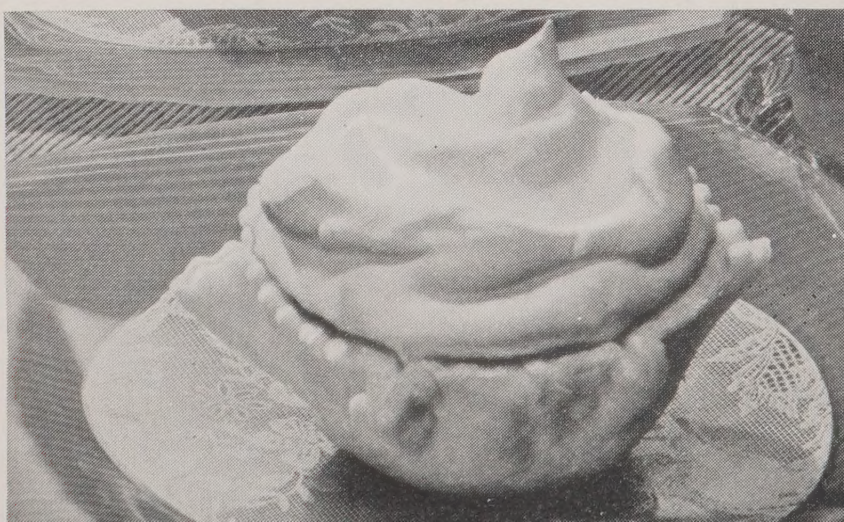
APTLY enough, the name "shortening" is, in a sense, literal. Don't you think of good pie crust as *short* . . . of a cake as tender . . . and of the fat which went into them as *shortening*? Shortening diminishes the

resistance of a baked flour mixture to crushing . . . lessens its ability to withstand pressure and makes it break easily, or, to put it another way, — a shortening makes a product short and tender.



This Friendly Apple Pie Welcomes a Close-up

Here is spicy fruit layered between golden, flaky pastry of melting tenderness and delectable flavor. The fluffy tart boasts crisp tenderness, too.

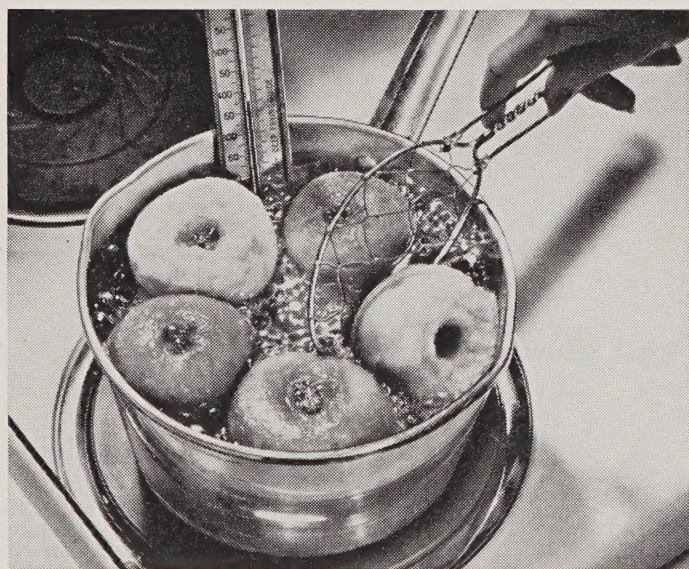


Let's see just how this physical action of a shortening takes place. In a simple dough made with flour and water — but with no shortening — the gluten or protein of the flour forms a network of continuous structure. If baked, this product is tough and hard and inedible.

Suppose, however, that you introduce some fat into the dough. The fat will then be widely dispersed among the flour particles, coating a portion of them so that they cannot stick together and form a continuous firm framework. It is this structural weakness which makes a product tender. The greatest degree of tenderness occurs when the largest surface of gluten and starch has been surrounded with fat.

A plastic shortening blends more readily and evenly with the flour than a less workable one, thus coating a maximum surface of gluten and starch particles. Thus the plasticity and consistency of a shortening are important in producing tenderness in the final product.

2. To Serve as a Frying Medium



French frying (frying in deep hot fat) gives such favorites as plump brown doughnuts.

THE mediums in which a food is cooked determine its character. Think of the difference in eating quality of a potato which has been cooked in water (boiled), in air (baked), and in fat (fried). These different qualities are brought about because the mediums of water, air, and fat

hold different amounts of heat units, and so permit the food to be cooked at different temperatures and rates.

There is a similarity in food cooked in air and fat because in both these mediums the high temperatures reached (370°F. and above) caramelize the food and give crisp brown crusts. Food cooked in fat (fried) has another quality, too, for some of the fat is absorbed, and thus enriches the flavor of the food.



Pan frying (cooking in a little hot fat in a skillet) adds appetizing savor to many foods.

Frying is an old, old cooking process. There are really two types of frying: *French* frying and *pan* frying.

French Frying means cooking in hot fat of sufficient depth to float the food, as in frying doughnuts, fritters, and croquettes. *French* frying may be *deep* frying in a kettle having a flat bottom and straight sides, or it may be *shallow* frying in special shallow-frying equipment or in an ordinary heavy skillet.

Pan Frying. The process of *pan* frying or *sautéing* is familiar to everyone and consists of cooking food in a skillet in a small amount of fat until brown and tender.

Whatever the kind of frying done, it is important that the fat be hot enough to form a crisp crust quickly on the outer surface of the food, yet not hot enough to smoke or decompose. Fats that have a high smoke point and great stability in resisting decomposition are best for frying.

3. *To Improve Texture*

Do you not agree that texture may be one of the most delightful aspects of a dish? How often a food tastes especially good because of certain attributes of texture. They're varied — these textures — like the weather, but more predictable. You look for wispy tenderness in pastry, creamy richness in a frosting, velvety texture in a cake, silky smoothness in the chef's sauce.

Now shortening makes a unique contribution to cookery by bringing about agreeable changes in texture. The eating quality of a cake, for example, is closely associated with texture, and this in turn, with the shortening which has become part of the finished cake. Ideal texture is often referred to as "velvety" because it is soft and delicate on the tongue. Shortening plays an important part in producing this desirable texture.

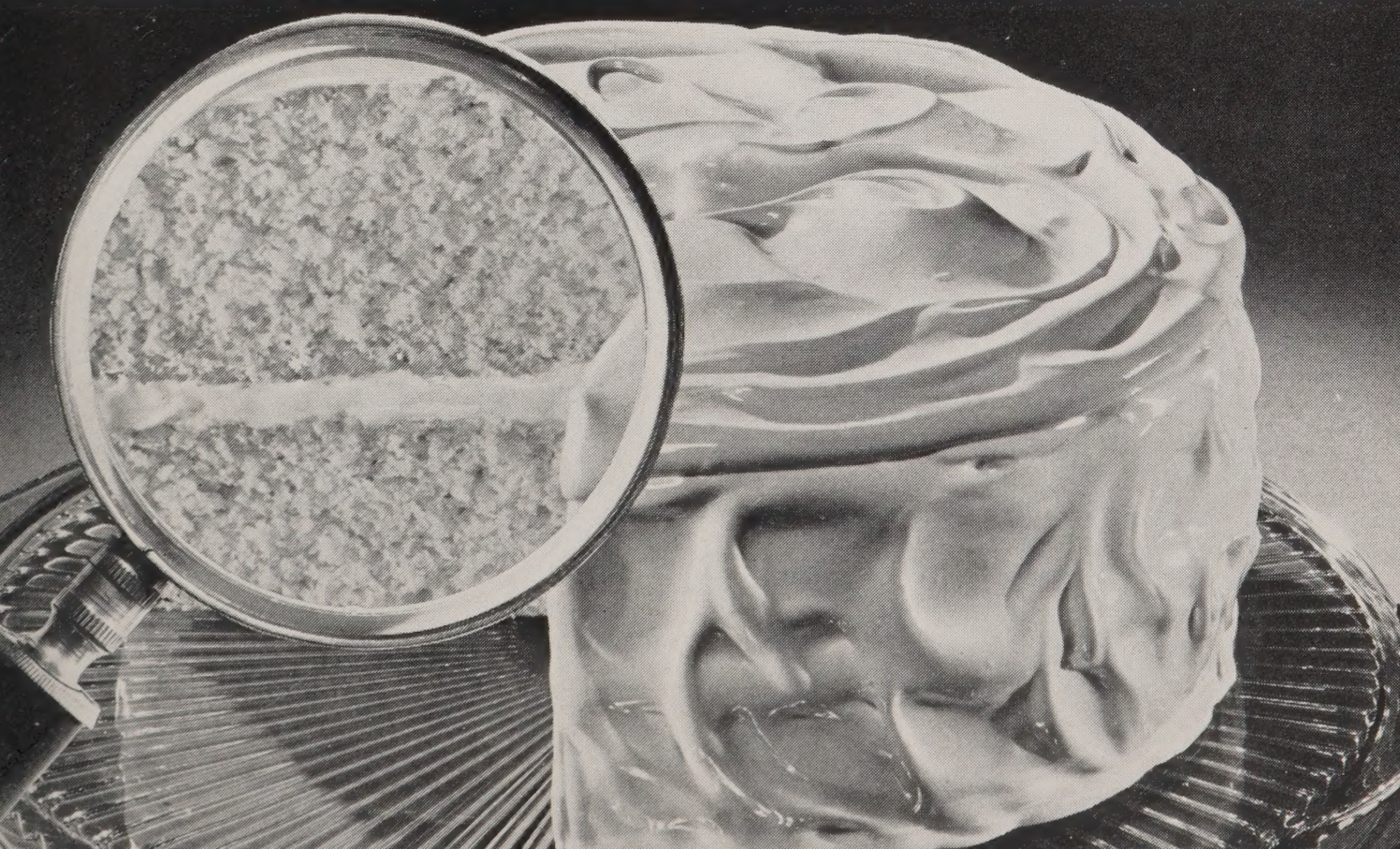
Then take an uncooked frosting. Shortening added to an icing mixture of confectioners' sugar and liquid adds desirable body. Instead of a rather heavy frosting that seems to droop sadly over the top and sides of the cake, the correct proportion of shortening improves the spreading quality so that the frosting can be "sculp-

tured" into glossy swirls and ridges. The icing also takes on creamy smoothness, moistness, and richness.



Shortening contributes rich, creamy smoothness to a frosting — makes it spread beautifully.

Then think of gravies and sauces and of how they reach their rich, smooth state because of shortening. A "gravy" or "sauce" consisting of only flour and liquid has a pasty, sticky character. The addition of the proper amount of shortening works a veritable saucepan miracle. The texture becomes smooth and silky — stickiness has disappeared. All this, of course, in addition to the greatly improved eating quality of the sauce.



4. To Act as a Carrier of Flavor

SHORTENING may affect the flavor of a dish in at least two ways. Fat serves as an efficient carrier of flavor because so many flavoring substances, both delicate and pronounced, are soluble in fat. This property may be put to excellent use in cookery.

In cake-making, one is wise to blend the flavoring extract, spice, or grated fruit rind with the shortening before creaming in the sugar. The shortening dissolves the aromatic substances and distributes them uniformly throughout the batter, giving an *even* delicacy of flavor to the cake.

In making the Pineapple Parfait Cake pictured on page 7, the grated lemon rind is added to the shortening and creamed in with the sugar. (See recipe, page 24.) The shortening incorporates the zestful lemon flavor, mingles it with the pineapple juice, disseminates it evenly through the batter, and thus brings an exquisite blend of flavor to the finished cake.

Again, this property of a shortening may be made to work flavor-wonders in such dishes as pot roasts, stews, croquettes, meat loaves, casseroles, meat pies, soups, and the like. Herb-seasoned stuffings for roast meats and fowl take on delightful new savor when pan fried ever so delicately with a little shortening. A brief sautéing of chopped onion or parsley in a little melted fat serves to dissolve the flavoring substances and blend them perfectly in the final dish.

In the second place, a shortening may be used because its characteristic flavor is desired in a dish. A familiar example is the addition of butter to mashed potatoes, green peas, and other cooked vegetables. Again, the flavor of eggs fried in bacon drippings may be preferred at times. And the Italian sings the praise of olive oil as a flavor that benefits almost any dish.

But along with this special use of a shortening for its typical flavor, one must not lose sight of the broad fields of cookery in which the flavor most desired comes from ingredients other than shortening.

5. To Enhance Palatability

IN making food more savory and more agreeable to the taste, shortening fulfills one of its most pleasant functions. But, you will say, isn't this function associated with some of the others? Doesn't enhanced eating quality go along with the tender texture of pastry, the delicate flavor of a cake, the smooth creaminess of an icing, the crisp nut-like crust of a croquette?

Of course, the answer is "Yes." But the very fact that palatability is so closely linked with many other aspects seems to give it point as a final and vital function that the ideal shortening must perform.



The crust of a croquette is so crisp and tender that it breaks at the light touch of a fork.

Palatability is a phase of cookery that deserves to receive its last full measure of appreciation. For this aspect of a dish which has so much to do with the enjoyment of food also has far-ranging importance in a nutritional sense. In other words, a food even though it be nutritious, fulfills its highest function in the body only when it is agreeable and pleasant to the taste.

6. To Increase the Nutritive Value of Foods

ONE of the most important aspects of any food is that which has to do with its use in the human body. Shortening is indispensable in the normal diet and performs a vital function in good nutrition. For a full discussion of its high caloric value and its nutritional importance, turn to page 17.

How to Study the Essential Qualities of a Shortening

IN the following Chart (pages 10–11) you will note that an ideal shortening has thirteen qualities, each of which is important in one or more of the major fields of cookery. The following simple laboratory tests suggest how each quality may be studied in its relation to the preparation of appetizing and wholesome food.

In order that you may become familiar with these tests, one shortening (Spry) is used as an example. You will want to extend your classroom study to include shortenings of different types.

Note the section — *Importance in Cookery* — in which each essential quality of a shortening is discussed in the light of its relation to good cookery and nutrition.

Through a careful study of this chapter and a working acquaintance with shortenings as outlined in these tests, you will find that you have not only added to your store of information on shortening but have broadened your general knowledge of cookery.

1. APPEARANCE — *vibrant, glossy, white.*

Open a can of Spry. Note the vibrant whiteness of the shortening — the freedom from all color. The satiny sheen suggests the creamy, smooth texture of the product. Notice the attractive surface . . . the neat way in which the can is filled so that no shortening touches the lid.



Appearance is a persuasive introduction to a shortening.

Now spread 1 teaspoon of Spry in a thin film on a piece of plain white paper. The shortening is so white that the paper appears to take on a grayish tinge.

Importance in Cookery

The appearance of a shortening is associated with its performance in cookery. Glistening whiteness is essential if a snowy white cake is to be obtained, for example.

Appearance is important, too, from a psychological standpoint. Everyone enjoys working with an attractive product — one which has aesthetic appeal as well as one which measures up to high standards of purity and performance.

2. PURITY — *pure, sweet.*

Melt 3 tablespoons of Spry in a small beaker. Then pour into a test tube to a depth of 5 inches. Note that the melted fat is so crystal clear that when you look down through the column of fat even the fine lettering on a coin can be read.



Importance in Cookery

The rigorous purity of a shortening is associated directly with its ability to resist the development of rancidity and to retain the sweet, bland flavor characteristic of the fresh product. Rancidity creates undesirable odors and flavors which will in turn impair and even destroy the delicate flavor of carefully prepared cakes, pies, and fried foods.

3. FLAVOR — *bland and neutral in odor and taste.*

Smell and taste a small amount of Spry direct from the can. See how bland and sweet it is — how free from odor and flavor.

Then put $\frac{1}{4}$ cup Spry into a small bowl, add $\frac{1}{4}$ teaspoon grated lemon rind, and blend. Now smell and taste this mixture, noting the fresh lemon odor and flavor. A bland, neutral shortening does not interfere with flavorings but lets them “come through” fully.

Qualities of an IDEAL SHORTENING

	PIES	CAKES	FROSTINGS	COOKIES	BREADS	FRYING
APPEARANCE <i>Vibrant, Glossy, White</i>						
PURITY <i>Pure, Sweet</i>						
FLAVOR <i>Bland and neutral in odor and taste</i>						
CONSISTENCY AND TEXTURE <i>Plastic, Smooth, Creamy</i>						
BODY <i>Maintains original consistency over a wide range of temperature</i>						
BLENDING QUALITY <i>Mixes easily, quickly, thoroughly</i>						
CREAMABILITY <i>Absorbs air quickly and holds it through mixing and baking</i>						



VERY IMPORTANT

and their IMPORTANCE in COOKERY

	PIES	CAKES	FROSTINGS	COOKIES	BREADS	FRYING
SHORTENING POWER <i>100% Efficient</i>						
MOISTURE-HOLDING CAPACITY <i>Enhances moistness and eating quality of final product</i>						
SMOKE POINT <i>Sufficiently high to insure odorless, smokeless fryings</i>						
STABILITY IN PACKAGE <i>Keeps sweet and fresh at room temperature</i>						
IN FRYING AND IN BAKING <i>Retains original purity throughout high cooking temperatures—no breakdown as revealed by smoke and odor in frying, off-flavors in baking</i>						
UNIFORMITY <i>No variation in shortening or its performance</i>						
DIGESTIBILITY <i>Wholesome, Nutritious Digestible</i>						



IMPORTANT



Importance in Cookery

Everyone appreciates the importance of flavor in fine cookery. But everyone does not realize the extent to which a bland shortening can help in creating fine flavor. Take cake, for example. Made with a neutral shortening, delicate flavorings like extracts and fresh fruit rinds can exert their full goodness in the cake. A two-egg cake made with a bland shortening and flavored with vanilla illustrates how delicate a cake of this type can be.

Blandness of a shortening is important in practically all cookery. Pastry is nut-sweet when made with a bland shortening . . . likewise fried foods, cookies, icings, and sauces have the flavor of the foods themselves.

4. CONSISTENCY AND TEXTURE — *plastic, smooth, creamy.*

Stir Spry right in the can with a small wooden spoon. See how plastic the consistency is — how pliable and workable.

Now take up a small amount of Spry on a spoon and throw the shortening, with a vigorous downward motion, onto a piece of waxed paper. Note how the shortening “ribbons off” in a soft, smooth curve from the spoon. Only a shortening of proper consistency responds to this test in this exact manner.



Next take a little Spry out of the can and spread it on a piece of waxed paper with a spatula. Note the smooth, creamy texture — the absence of all graininess or lumps.

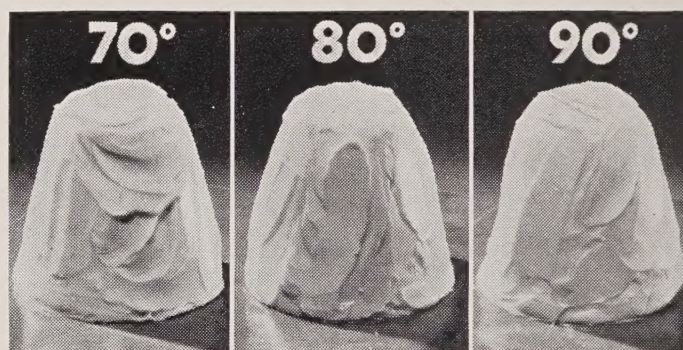
Importance in Cookery

Plasticity and smooth texture are important characteristics of a shortening. They make it easy to measure and to mix. Also, a plastic shortening “spreads” or distributes itself more readily and evenly through a dough than a hard shortening and thus promotes tenderness in the final product.

A plastic, creamy shortening is especially desirable in cake-making. Firm shortenings must either be pre-creamed until soft or allowed to soften at room temperature before they can be properly creamed with the sugar.

Shortenings that need not be refrigerated lend ease and convenience to cookery.

5. BODY — *maintains original consistency over a wide range of temperature.*



These mounds of shortening held their original consistency despite mounting temperatures.

This property refers to the ability of a shortening to maintain its original consistency over a wide range of temperature. Have you ever had the disturbing experience on a hot summer day of seeing a shortening flatten right out in the mixing bowl when you were trying to cream it with the sugar into a light, fluffy mass? The heat so affected the body of the shortening that air could not be incorporated successfully in the mixture. You will recall, too, the disappointing cake that came out of the oven — the poor volume, the flat top, the heavy, dense character of the cake.

Importance in Cookery

Body is all-important in the making of feathery-light cakes and frostings of good cutting consistency. In pastry, too, body exerts an influence on final quality. If a shortening “oils out,” the flour particles are soaked rather than coated with thin films of fat and the pastry is mealy rather than flaky.

The ideal shortening maintains its original consistency over a wide range of temperature. Neither the fluctuating temperatures typical of the home kitchen nor the seasonal differences in temperature affect its original plasticity or its behavior in cookery.

HOW TO STUDY THE ESSENTIAL QUALITIES OF A SHORTENING



This even mixture of shortening and cocoa shows good blending quality in the shortening.

6. BLENDING QUALITY — *mixes easily, quickly, thoroughly.*

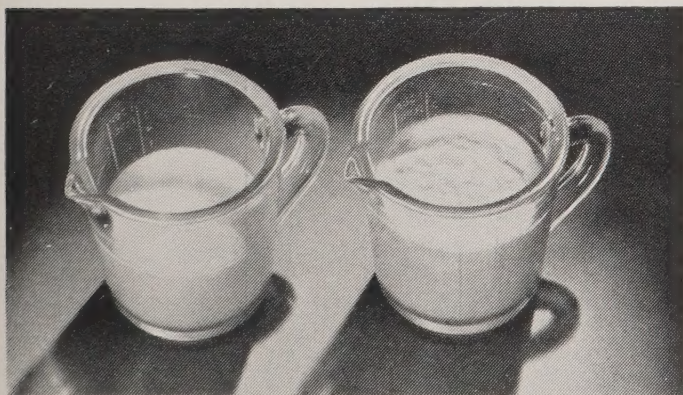
Put $\frac{1}{4}$ cup Spry and 1 tablespoon cocoa in a bowl and mix thoroughly. See how easily and quickly the cocoa blends with the shortening. Note the evenness of the blend. The shortening and cocoa are so perfectly mixed that one cannot be distinguished from the other.

Importance in Cookery

The ease and efficiency of all mixing operations depend greatly upon the blending quality of the shortening. A shortening should blend with ingredients quickly, easily, and thoroughly. The flavor of the finished product is enhanced, too, when the flavorings are perfectly blended and distributed evenly throughout the mixture. Another aspect of blending quality has to do with cake-making. A shortening with good blending quality mixes fast with the sugar and combines with other ingredients to make a well-blended batter.

7. CREAMABILITY — *absorbs air quickly — holds it through mixing and baking.*

Put $\frac{1}{4}$ cup Spry and $\frac{1}{2}$ cup sugar in a bowl and mix only enough to blend. See how easily and quickly Spry mixes with the sugar. Pack the mixture carefully into a measuring cup



The increased volume of the creamed mixture in cup on right is due to air incorporated in creaming.

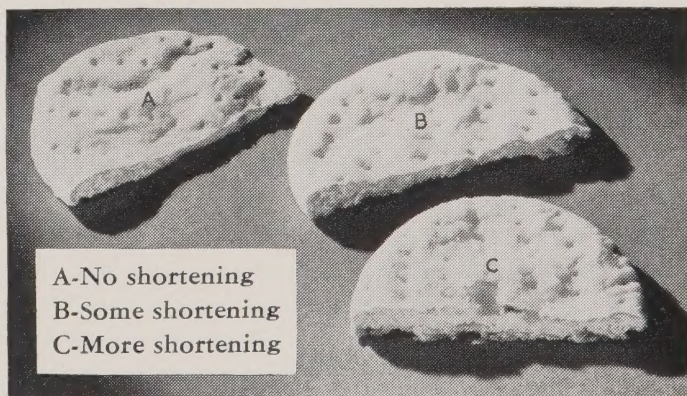
and read the measurement. Now return to the bowl and cream well with a wooden spoon for 3 minutes. See how light and fluffy the mixture is now. Again measure the mixture in the cup. Note how the volume has increased because of the large amount of air incorporated during the creaming.

Importance in Cookery

The creamability of a shortening is highly important in cake-making for the volume and lightness of the final cake depend upon it to a great degree. Good creamability means the ability to absorb large amounts of air rapidly during the mixing and blending of the shortening and sugar. The shortening must have the further ability of holding this incorporated air throughout the baking process. Shortenings which do not have good creamability are not adapted to cake-making.

Once a shortening has been melted, either partially or completely, the original creamability is lost. This explains why a cake made with liquid shortening does not have the volume, lightness, grain, and texture of one made with a shortening which has been creamed well with the sugar. Creamability is important, too, in making creamy, fluffy uncooked icings and in mixing any dough where shortening is needed.

8. SHORTENING POWER — *100% efficient.*



Shortening makes the difference (see text).

The following tests illustrate the physical effect of shortening on a flour mixture. Note how the character of the final product is determined by the gluten structure and how this, in turn, is modified by shortening.

A. Flour mixture (with no shortening)

Add $\frac{1}{3}$ cup water to 1 cup sifted flour and work into a dough with a fork. Roll to $\frac{1}{8}$ -inch thickness and prick with fork. Cut out circles with a 3-inch biscuit cutter and bake in a very hot oven (450°F.) 18 minutes.

HOW TO STUDY THE ESSENTIAL QUALITIES OF A SHORTENING

Note that the baked circles of dough resemble hard-tack. They are dull brown in color and extremely hard and tough in texture. Considerable pressure is required to break them. In such a product the flour structure is made up of long, tough, glutinous strands.

B. Flour mixture (with shortening added)

Add 2½ tablespoons Spry to 1 cup sifted flour and cut in fine. Sprinkle ¼ cup water over mixture and work lightly into a dough with a fork. Roll and cut as before and bake in a very hot oven (450°F.) 15 minutes.

Note the striking change in appearance. The circles now have slightly blistered tops. While they may be broken more readily, they still have the hardness of pilot bread. Note the flaky layers inside. The shortening has tended to prevent the formation of long, tenacious strands of gluten and thus promoted tenderness.

C. Flour mixture (with more shortening added)

Cut 5 tablespoons Spry into 1 cup sifted flour. Sprinkle 2 tablespoons water over mixture and work into dough. Roll and cut as before; bake in very hot oven (450°F.) 13 minutes. Now the baked circles look like pastry. They are golden brown, tender, and flaky. The larger amount of shortening has modified the gluten, making a crisp and tender product.

Importance in Cookery

Baked foods are dependent upon shortening power for tenderness and pleasurable eating quality. Pastry owes its tenderness and flakiness to effective shortening action. Cakes, cookies, and breads may be made passably tender or meltingly tender by varying the amount of shortening. It is of prime importance to select a shortening known to be 100% efficient in its shortening action.

9. MOISTURE-HOLDING CAPACITY — enhances moistness and eating quality of final product.

Place 1 cup Spry in a large bowl. In a small bowl mix ½ teaspoon liquid red food coloring with 1 cup water. Add this colored water to the shortening, 1 tablespoon at a time, stirring carefully after each addition until the water is fully absorbed. Note that the shortening absorbs an equal measure of liquid readily.

Store mixture at room temperature for several days. At the end of that time, notice that the shortening still retains the liquid — none has separated out. Shortening should be able to absorb at least an equal amount of liquid with perfect safety.

Importance in Cookery

The capacity of a shortening to absorb and hold moisture is closely associated with both the eating quality and the keeping quality of the finished product. Moisture-holding capacity has much to do with the delectable moist



One cup of shortening should be able to absorb and hold at least an equal amount of liquid.

crumb of a cake, the silky moistness of a yeast roll, the soft creaminess of a frosting, and the ability of these products to stay fresh.

10. SMOKE POINT — sufficiently high to insure odorless, smokeless fryings.

The behavior of a frying fat may be studied in conjunction with the potato-frying demonstration outlined on page 15.

Importance in Cookery

The smoking behavior of a shortening is of major importance in frying. Smoke arising from a kettle of hot fat is a visible sign of the decomposition of that fat with the consequent lowering of the smoke point. This breakdown



A fat should not smoke at proper frying temperatures.

is accompanied by irritating fumes and a sharp, disagreeable odor. It is, therefore, highly desirable that the smoke point of a fat be well above those temperatures used for frying (360° to 390°F.). Furthermore, a fat

HOW TO STUDY THE ESSENTIAL QUALITIES OF A SHORTENING

should maintain a high smoke point throughout repeated fryings in order that the fat may retain its original purity and sweetness and impart to the fried foods a clear sweet delicacy of flavor.

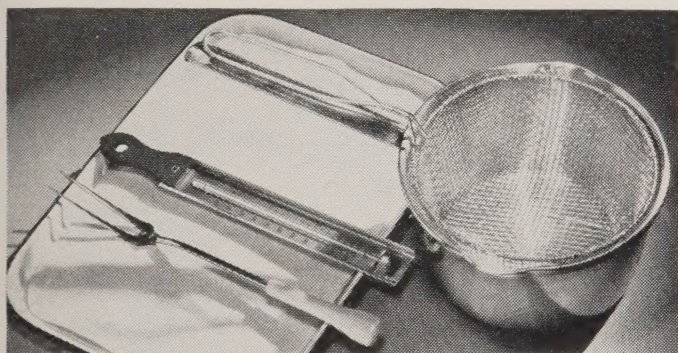
11. STABILITY — *in the package, in frying and in baking.*

Stability in the package — *keeps sweet and fresh at room temperature.*

Open a can of Spry, fit the cover on snugly, and store at room temperature (on a shelf or in a cupboard) for at least one month. At the end of that time note that the shortening is still sweet and fresh.

Stability in frying — *retains original purity—no breakdown as revealed by smoke and odor.*

This test provides the teacher with an excellent means of demonstrating to the pupils the principles and fundamental procedures of French frying. French fried potatoes are suggested as the food to be fried because of their ease of preparation and their universal appeal.



Good equipment makes for good results in deep frying.

For the frying equipment, you will need a straight-sided pan, a frying basket, and a frying thermometer. Have the pan filled two-thirds full of hot melted fat. Then prepare and fry the potatoes as directed in the following recipe for French Fried Potatoes.

FRENCH FRIED POTATOES

WASH and pare 6 large potatoes. Cut in lengthwise strips, $2\frac{1}{2} \times \frac{3}{8}$ inches. Dry thoroughly and divide into 3 lots.

Blanching — 370°F. — 5 to 7 minutes per basket.

Heat 2 to 3 pounds Spry to 370°F. Lower $\frac{1}{3}$ of potatoes in basket into deep hot Spry. Fry until potatoes are tender but not brown (5 to 7 minutes). Drain on absorbent paper. Blanch remaining 2 lots in same manner.

Browning — 390°F. — 1 to $1\frac{1}{2}$ minutes per basket.

Lower $\frac{1}{2}$ of blanched potatoes in basket into Spry which has been reheated to 390°F. Fry until potatoes are crisp and brown (1 to $1\frac{1}{2}$ minutes). Brown remaining half in same

manner. Drain on absorbent paper, sprinkle with salt, and serve immediately.

If desired, the potatoes may be fried in a single frying period at 385°F. for 20 minutes, or until tender and brown.

Note that the hot Spry does not smoke or give off unpleasant odors at the temperatures used for frying. Taste the French fried potatoes and see what sweet, delicious flavor they have. Strain the hot fat through several layers of cheesecloth to remove food particles. Note how sweet and pure the fat is. This fat may be set aside and used again and again for frying without decomposition of the fat. Replenish the fat with additional Spry, if necessary.

Stability in baking — *retains original purity—no breakdown as revealed by off-flavors.*

Prepare pastry dough as follows:

1 cup sifted all-purpose flour	$\frac{1}{3}$ cup Spry
$\frac{1}{2}$ teaspoon salt	2 tablespoons cold water (about)

Sift flour and salt together. . . . Add $\frac{1}{2}$ of Spry and cut in until mixture is as fine as meal. Add remaining Spry and continue cutting until particles are size of navy beans. . . . Sprinkle water gradually over mixture. With a fork, work lightly into a dough.

Roll dough $\frac{1}{8}$ -inch thick and prick with fork. Cut six 3-inch squares, place on baking sheet, and bake in very hot oven (450°F.). Bake two squares 12 minutes, two more squares 14 minutes, and the remaining two 18 minutes. Taste the different samples. Note the sweet nut-like flavor of all the squares, even of the overbaked dark brown ones.

Importance in Cookery

Stability is a highly important quality in a shortening at all times. To say that a shortening has good *shelf stability* means that it keeps sweet and fresh in the package at room temperature and without refrigeration. This property is of great practical convenience because it saves valuable refrigerator space for perishable foods and insures the use of a sweet, fresh shortening at all times.

A shortening that has *fry-kettle stability* retains its original purity and sweetness throughout repeated fryings. It does not smoke or give off disagreeable fumes during frying because the decomposition point of the fat is well above correct frying temperatures. Such a fat is economical because it can be used over and over again for frying. Thus a highly stable shortening means pleasant frying conditions, greater economy, and delicate sweetness in the fried foods themselves.

HOW TO STUDY THE ESSENTIAL QUALITIES OF A SHORTENING

Oven stability contributes materially to fine baking. Made with shortening which does not break down in the heat of the oven, products have a delicate flavor for no off-flavors develop during baking. This quality is of special importance in mixtures such as cookies and pie crust which contain relatively large amounts of shortening and little moisture.

In pastry, stability of the shortening is of the utmost importance because of the high temperature required for baking and the thinness of the crust which permits the high heat to penetrate the pie. Pie crust, particularly the overbrowned edges, will have an acrid taste if the shortening has broken down during baking. Pastry made with a stable shortening will be nut-sweet even if overbrowned.

In greasing cake pans, cookie sheets, and muffin tins it is advisable to use a shortening that remains sweet at high temperatures.

12. UNIFORMITY—*no variation in shortening or its performance.*

The quality of Spry does not vary. Its characteristics are uniform during all seasons and in all sections of the country. Only by continued observation and use of a shortening is one able to determine the uniformity of its characteristics and behavior.

Importance in Cookery

Uniformity is an important quality of any ingredient used in cookery. Certain characteristics of any ingredient are determining factors in its successful use. For example, quick, easy mixing is associated with a plastic,

creamy shortening; light cakes with a shortening of excellent creamability; smokeless, odorless frying with a shortening that remains sweet throughout repeated fryings. Thus uniform results in baking and frying are definitely linked with uniformity of the shortening itself.

13. DIGESTIBILITY—*wholesome, nutritious, digestible.*

Digestibility refers to the ability of any product to be assimilated by the body and thereby contribute to its nutritional requirements. Spry is digestible, wholesome, and nutritious and functions in the digestive processes.



Importance in Cookery

Digestibility is a vital quality of a shortening. The digestibility of foods prepared with shortening is directly associated with good cookery practices. (See page 17.)

**AN IDEAL
SHORTENING**
is uniform in
quality and
performance
in all seasons



The Nutritional Aspects of Shortening

OUR daily food is composed of six groups of nutrients: fats, carbohydrates, proteins, water, minerals, and vitamins. These nutrients, in turn, supply the body with energy, build and repair tissues, and regulate body processes.

● Some foods supply certain nutrients in important amounts. For example, foods high in fat are butter, vegetable shortening, lard, olive oil, bacon; foods high in carbohydrate are sugar, honey, potatoes, cereals; foods high in protein are meat, fish, eggs, poultry, and nuts.

● Other foods, such as milk, spinach, oranges, and tomatoes are valuable because they supply minerals or vitamins in important amounts. In planning a balanced diet care is taken to include those foods which will furnish the body with the elements needed for good nutrition.

● Of all the nutrients, fats yield the most calories per unit of weight. They furnish more than twice as many calories as either carbohydrates or proteins. The caloric value of shortenings differs according to their composition. Some shortenings are 100% fat and supply over 4000 calories per pound. Butter and oleomargarines, however, since they contain only 80 to 85% fat and a considerable percentage of water, average about 3300 calories per pound. Shortenings, it will be seen, are highly important in the diet as rich sources of fuel in compact form.

● Fats supply the body with quick and lasting energy. People engaged in muscular work need a greater supply of energy foods than those less actively employed. Also, people who are considerably underweight or whose bodies are wasted by certain illnesses need a diet rich in energy foods. Thus shortening is important in the normal daily diet and in special high-caloric diets.

● Some fats, particularly butter, furnish significant amounts of vitamins, such as

A and D. It is universally recognized that fats are highly essential to our dietary requirements. A critical shortage of fat, therefore, may even determine a nation's destiny.

● Today, the digestibility of properly fried foods is a well-established fact. Scientific research has revealed the fallacy of the old idea that "fried foods are hard to digest." Extensive experiments have shown that foods *properly fried* are "as digestible as if baked or boiled."

● It must be borne in mind, however, that the digestibility of fried foods is inseparable from good frying methods. If the temperature of the frying fat is too low, the fat-absorption in the final product will be excessive and consequently the digestion of the carbohydrates and proteins will be slowed up. Then again the frying temperature should not be too high or decomposition of the fat may occur with the production of irritating substances. It is thus apparent that the intelligent selection and use of shortening in frying are dominant factors in the digestibility of fried foods.

● Their sustaining or "staying" quality is a well-known advantage of fats. Everyone has doubtless experienced the uncomfortable "emptiness" which quickly follows a meal low in fat.

● No single food, however ideally it may supply the body with calories, can fully perform its function as food unless it contributes a measure of enjoyment. For example, there may be an equal number of combined calories in a cup of shortening, a bowl of flour, a few fresh apples, and a measure of sugar. But to give these ingredients palatability and nutritive value in the truest sense, the simple alchemy of the pie-maker's art is needed to transform them into a tender, flaky apple pie of tempting goodness.

This Is Spry

The story of the scientific background in the manufacture of a modern all-vegetable shortening ideal for general use in cookery.

AS a home economics student do you not wish to study foods intelligently and understand clearly the hows and whys of their behavior in cookery? Then you know that basic information about the ingredients commonly used in cookery is as vital to your background as bone and sinew to a sturdy child. You need to know about the composition of flour and milk and eggs; about the structure of meat; about the kinds and classes of vegetables. And you seek to broaden your knowledge of each ingredient by learning something about its manufacture — what it is made from and how it becomes the familiar product you buy from your grocer.

So in this chapter you may read the interesting story of how Spry is made. As you read you will see that every single step in the manufacture is directly responsible for certain qualities in the final

product, such as gleaming whiteness, plastic consistency, superior keeping quality, sweet blandness, and creamy texture.

Spry is an all-hydrogenated vegetable shortening. The factories in which Spry is made are new and modern and spotlessly clean. The equipment and machinery represent the most advanced technical efficiency. Pipes and vessels of stainless steel give a bright-as-a-pin appearance and assure the utmost in sanitation. Complete air-conditioning throughout the packing rooms insures an atmosphere free from dust and foreign odors. From first to last, Spry is not touched by human hands.

Finally, the finished shortening is put through practical baking and frying tests in the Spry Kitchen. Every effort is made to guarantee to the consumer a product that will fulfill every function demanded by a shortening in home cookery.



The Open Can Is Eloquent of Quality

Scientific Control of Every Step in the Manufacture

THE final quality of every can of Spry is guaranteed by scientific control of every step in the manufacture. In the Laboratory, specially trained chemists make exacting tests to make certain that specified standards of quality are fully met at every step. There must be not the slightest deviation from these rigid standards at any time. So vital is this systematic control that the manufacture of Spry proceeds from one operation to another only in accordance with the control by the Laboratory.

In the manufacture of Spry, there are eight steps, each of which is important in establishing certain desirable characteristics in the finished shortening.

1

Selection of Vegetable Oil

the basis of superior quality

IN Spry — as in any product — final quality begins in the raw materials of which it is made. Only very choice and carefully selected vegetable oil is used in the making of Spry. This oil comes exclusively from the vegetable kingdom — no animal fat whatsoever is used.

The oil is bought on strict specifications. Every lot is tested by the Laboratory to insure that certain established high standards of quality are fully met.

2

Double Refining

for extra purity

Now the selected oil is carefully refined and purified — not once — but *twice*. This re-refining or *double-refining* process specially purifies the oil and assures the *extra* purity of Spry.

3

Clarification

for gleaming whiteness

EVEN after the double refining, the oil is not considered by the technical staff to be ready for hydrogenation — the key step in the transformation of the oil to a creamy shortening. And so the oil is still further processed and treated by the most modern methods of clarification in order to prepare it properly for hydrogenation. The high degree of control exercised in every manufacturing operation is reflected in the quality of the finished product.

4

Hydrogenation

*for proper consistency
and maximum stability*

THIS step — *hydrogenation* — is extremely important because it is responsible for two of Spry's outstanding characteristics.

- a. The superior plastic consistency which suits it ideally to the requirements of baking.
- b. The exceptional keeping quality which makes it possible for Spry to keep sweet and fresh without refrigeration and to retain its blandness through repeated fryings. Keeping quality means the ability to resist rancidity and to retain the bland, sweet flavor of the fresh product.

What actually happens in the hydrogenation process is that hydrogen gas is combined with the liquid vegetable oil so that the desired plastic consistency can be obtained in the finished shortening. The amount of hydrogen introduced is carefully controlled by exclusive patented processes to insure that soft plasticity which characterizes Spry.

5

Special Blending

for uniformity

THE lots of hydrogenated oil are mixed by a patented and exclusive *blending process* which controls accurately the consistency of the finished shortening. So highly has this process been developed that the same degree of consistency is maintained uniformly from batch to batch. This is why Spry is uniform in its soft plasticity and does not vary in its pliable consistency.

6

High-vacuum Processing

for absolute blandness

FOLLOWING hydrogenation and blending, comes *high-vacuum processing* which is responsible for the absolute blandness of Spry. During this process, skilled experts periodically taste, test, and evaluate the oil for flavor. When these scientific tasters are satisfied that the flavor meets exacting standards of blandness — *and only then* — is the oil ready for final clarification and texturation. At this stage the oil has attained the brilliancy which is responsible for the clear white color of Spry.

7

Chilling and Texturating

for smooth, creamy texture

THE oil next enters the stage of manufacture which is accountable for Spry's smooth, creamy texture. This stage consists really of two steps — *chilling* and *texturating*. First the oil is passed through chilling machines where it is changed from a liquid to a semisolid state. Great care is taken to carry the chilling to just the right degree in order that the correct consistency will be maintained.

Now the chilled stock passes continuously to Spry's creaming system. Here it is progressively creamed through repeated stages of texturating until finally

the even, smooth, creamy texture of Spry is attained. This process also brings out the vibrant whiteness and develops fully the degree of plasticity which was established during hydrogenation.

This patented texturating process is exclusive with Spry and produces the *triple-creamed* texture — that smooth creaminess for which Spry is so well known. The creamability of Spry is outstanding — it “creams up” readily with sugar and has the ability to hold air throughout the baking process.

It is recognized that a smooth, creamy texture and good creaming properties are highly important qualities of a shortening. They are identified with light, delicate cakes and all mixing operations in cookery.

8

Automatic Filling Machines

sealed cans protect purity

THE creamy Spry is now pumped direct to the filling machines. The precision with which these machines operate is captivating. An exact weight of shortening is poured into each scrupulously clean can as it passes under the nozzle of the machine. By delicate adjustment of the filling operation, the shortening in each can is given a distinctive swirled surface and is also kept from touching the lid.

Once the cans are filled, they move on to the sealing device which fastens the lids on air-tight. Then a cardboard disc is fitted snugly onto the lid of each can. On the reverse side of each disc are printed tested recipes for a large variety of dishes.

The lithographed can in which Spry is packed is neat, trim, and easy to keep clean. It can be wiped off with a damp cloth and kept as shiny-clean as new. The hinged lid is another convenient feature of the can.

The one- and three-pound cans are the most popular sizes although the six-pound tin with the bail is an established favorite in homes where larger amounts of shortening are commonly purchased.

An Ideal Shortening for the Foods Laboratory

One Shortening for Every Use in Cookery

IN the home economics laboratory — just as in the kitchen at home — there are many reasons why it is advantageous to use an all-purpose shortening. When one and the same shortening can be used with equal success whenever and wherever a shortening is called for, old customs and practices are streamlined. New convenience and greater ease enter the kitchen. Even the storage problem is simplified, for *one* shortening — rather

than several — can be kept on the shelf.

Spry is such a shortening — an all-purpose shortening that fulfills ideally the diversified rôle that such an ingredient must play in general cookery.

Its all-purpose character makes it perform equally well in the entire range of cookery — cakes, pies, frying, cookies, breads, and frostings. Spry can be used in any recipe that calls for shortening and in the amount specified in the recipe.





The Spry Way Is an Easy Way

THE *Spry Way* is identified with tested Spry recipes and refers to the use of Spry in the cooking procedures and practices recommended for its use. The Spry Way lends greater ease and speed to all kinds of baking, adds appreciable economy to frying, and fosters dependable results. In cake-making, Spry "creams up" with the sugar with seemingly no effort. And within the space of a few minutes a large amount of air is enclosed in the fluffy mixture of shortening and sugar — all of which means airy lightness and excellent volume in the finished cake.

Spry is always ready for use just as it comes from the can. Its pliable consistency does away with time-consuming "conditioning" at room temperature. Its smooth, creamy texture eliminates tiring pre-creaming in the mixing bowl.

Spry mixes with all ingredients quickly, easily, and perfectly. In making pastry, biscuits, shortcake, and the like, Spry "cuts" into the flour with ease and dispatch. Because of its creamy plasticity, Spry can be cut quickly into the dry ingredients in making muffins, thus eliminating the extra step of melting.

How to Measure Spry

IT is as easy to measure Spry as it is to scoop it out of the can. A rubber scraper or wooden spoon is a convenient utensil for removing the shortening from the can and packing it into the measuring cup. Pack the shortening firmly into the cup, then level it off with a knife or spatula just as in measuring other ingredients.

The ease, speed, and neatness of this way of measuring recommends it in preference to the water-displacement method sometimes used. The little sets of measuring cups, scaled 1 cup — $\frac{1}{2}$ cup — $\frac{1}{3}$ cup — $\frac{1}{4}$ cup, are especially convenient for use in measuring shortening. In measuring $\frac{1}{4}$ cup of shortening (or less), it is convenient to use a tablespoon.

All tested Spry recipes are based on

level measurements made with standard measuring cups and spoons.



To measure Spry, scoop it out of the can . . . pack firmly into measuring cup . . . level off with spatula.

Tested Spry Recipes

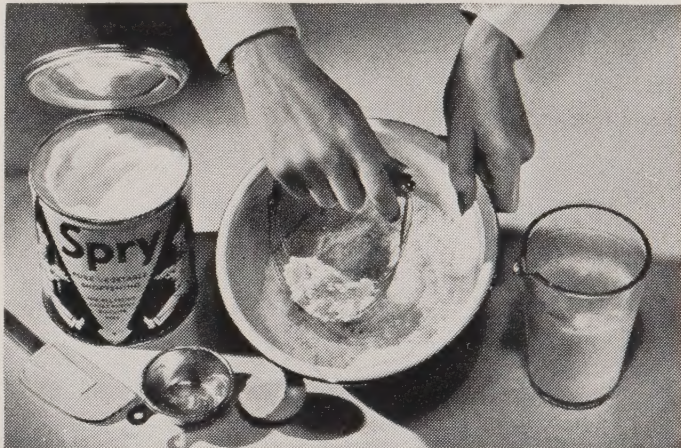
THE Spry Kitchen is a spacious, sunny, air-conditioned room overlooking the historic Charles River. This beautiful new Kitchen is completely equipped with the most modern household equipment and testing devices. A staff of Home Economists is continually at work exploring the field of shortening in its manifold relations to cookery. Tests are constantly under way to find better ways of using Spry, for the underlying purpose of the Kitchen is to help the housewife in her cooking problems. The accuracy of these tests and the carefully controlled procedures observed at all times are reflected in the surety of Spry recipes.

Recipes for use with Spry are continually being developed in the Spry Kitchen. All recipes are built with the utmost care. Tests and re-tests are made to insure the dependability of every recipe before it is finally released for circulation. New and improved methods of mixing are incorporated in Spry recipes. They represent the best technics in modern home cookery.

The final dish must meet the highest standards of quality. Other factors that

are watched in developing Spry recipes are: economy, simplicity and ease of method, national food tastes, popular flavor preferences, availability of ingredients, and equipment and cooking practices commonly used in the home.

Spry recipes are distributed in cookbooks, current advertising, cooking schools, and in numerous other media. This new shortening has made countless friends throughout the country and has established itself as part and parcel of the best American cookery.



Forget the "melting step" in making hot breads. Creamy Spry cuts into the flour easily — quickly.

Selected Recipes

SPICY APPLE PIE

- | | |
|----------------------------------|------------------------|
| 1 recipe Spry Pie Crust | 1 teaspoon cinnamon |
| 6 large tart apples, sliced thin | 1/8 teaspoon salt |
| 1 cup sugar | 1 teaspoon lemon juice |
| 1/2 teaspoon nutmeg | 1 tablespoon butter |
- Roll 1/2 of dough 1/8-inch thick and line a 9-inch pie plate. Fill pie shell with sliced apples. . . . Mix sugar, spices, salt, and lemon juice. Sprinkle over apples. Dot with butter. Moisten edge of pie with water. . . . Roll remaining dough for top crust and cut a few slits to permit steam to escape. Fit top crust over apples and seal edge of pie. . . . Bake in hot oven (425° F.) 50 to 60 minutes.

SPRY PIE CRUST

- | | |
|-------------------------------------|---|
| 2 1/4 cups sifted all-purpose flour | Milk (either whole or skim) can be used instead of water for pastry with a special brown bloom. |
| 1 teaspoon salt | |
| 3/4 cup Spry | |
| 5 tablespoons cold water (about) | |
- Sift flour and salt together. . . . Add 1/2 of Spry and cut in until mixture is as fine as meal. Add remaining Spry and continue cutting until particles are size of navy bean. . . . Sprinkle water gradually over mixture. With a fork, work lightly into a dough. Add just enough water to moisten. . . . Makes 1 two-crust 9-inch pie.

*Selected Recipes — Continued***PINEAPPLE PARFAIT CAKE**

$\frac{1}{2}$ cup Spry	3 cups sifted
$\frac{3}{4}$ teaspoon salt	flour
$\frac{1}{2}$ teaspoon grated	$\frac{3}{4}$ cup canned
lemon rind	pineapple juice
1 egg yolk	$\frac{1}{4}$ cup water
$1\frac{1}{2}$ cups sugar	4 egg whites,
3 teaspoons baking	stiffly beaten
powder	

Blend Spry, salt, lemon rind, and egg yolk. Add sugar gradually and cream well. . . . Sift baking powder with flour 3 times. Add flour to creamed mixture, alternately with combined pineapple juice and water, mixing after each addition until smooth. . . . Fold in egg whites. . . . Bake in two deep 9-inch Spry-greased layer pans in moderate oven (350° F.) 25 minutes. . . . Spread Pineapple Parfait Frosting between layers and on top and sides of cake.

PINEAPPLE PARFAIT FROSTING

2 egg whites, un-	$\frac{1}{8}$ teaspoon cream
beaten	of tartar or
$1\frac{1}{2}$ cups sugar	1 teaspoon light
5 tablespoons canned	corn sirup
pineapple juice	$\frac{1}{3}$ teaspoon grated
	lemon rind

Combine egg whites, sugar, pineapple juice, and cream of tartar (or corn sirup) in top of double boiler and mix thoroughly. . . . Place over rapidly boiling water and beat constantly with rotary egg beater until mixture will hold a peak (about 7 minutes). . . . Remove from fire, add lemon rind, and beat frosting until it is cool and thick enough to spread. . . . Makes enough frosting to cover tops and sides of two 9-inch layers.

CHOCOLATE FROSTING

2 tablespoons Spry	2 cups sifted con-
1 tablespoon butter	fectioners'
3 ounces chocolate	sugar
5 tablespoons	$\frac{1}{4}$ teaspoon salt
hot milk	$\frac{1}{2}$ teaspoon vanilla

Melt Spry, butter, and chocolate together over hot water. Cool. . . . Pour hot milk over combined sugar and salt and stir until sugar is dissolved. . . . Add vanilla. Add chocolate mixture and beat until thick enough to spread. . . . Makes enough frosting for tops of 18 cup cakes or for tops and sides of two 8-inch layers.

DOUGHNUTS

4 cups sifted	2 tablespoons
all-purpose flour	Spry
$\frac{1}{2}$ teaspoon nutmeg	$\frac{3}{4}$ cup sugar
$\frac{1}{2}$ teaspoon mace	4 egg yolks,
$\frac{1}{4}$ teaspoon cinna-	beaten, or 2
mon	eggs and 1
$1\frac{1}{4}$ teaspoons salt	egg yolk
1 teaspoon soda	1 cup thick sour
$\frac{1}{2}$ teaspoon cream	milk
of tartar	

Sift flour, spices, salt, soda, and cream of tartar together 3 times. . . . Cream Spry and sugar until well blended. . . . Add egg yolks and mix well. Add milk and mix thoroughly. . . . Add sifted dry ingredients and mix until smooth. . . . With as little handling as possible, roll dough on floured board to $\frac{3}{8}$ -inch thickness. Let dough stand 20 minutes. . . . Cut with 3-inch doughnut cutter. . . . Fry in deep hot Spry (375° F.) until brown, turning when first crack appears. Drain on absorbent paper. . . . Makes 2 dozen.

SUGAR COOKIES

$\frac{1}{2}$ cup Spry	2 eggs, beaten
$\frac{1}{2}$ teaspoon salt	2 tablespoons milk
$\frac{1}{2}$ teaspoon grated	2 cups sifted flour
lemon rind	1 teaspoon baking
$\frac{1}{2}$ teaspoon nutmeg	powder
1 cup sugar	$\frac{1}{2}$ teaspoon soda

Blend Spry, salt, rind, and nutmeg. Add sugar gradually and cream well. . . . Add eggs and milk and mix. . . . Sift flour with baking powder and soda. Add to creamed mixture, blending well. . . . Drop from teaspoon on Spry-greased baking sheets. Let stand a few minutes, then flatten cookies by stamping with a glass covered with a damp cloth. Sprinkle with sugar. . . . Bake in moderate oven (375°F.) 10 minutes. Makes 3½ dozen.

MUFFINS

$2\frac{1}{2}$ cups sifted flour	2 tablespoons sugar
$3\frac{1}{4}$ teaspoons bak-	$\frac{1}{3}$ cup Spry
ing powder	1 egg, beaten
1 teaspoon salt	$1\frac{1}{4}$ cups milk

Sift flour with baking powder, salt, and sugar. (Sugar can be omitted, if desired.) . . . Cut in Spry until mixture is like meal. . . . Combine egg and milk. . . . Turn liquids into dry ingredients and stir vigorously until all flour is dampened. . . . Bake in Spry-greased muffin pans in hot oven (425° F.) 25 to 30 minutes. . . . Makes 12 large muffins.

